RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

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RAW SEQUENCE LISTING DATE: 03/22/2005 PATENT APPLICATION: US/09/825,212A TIME: 11:46:19

Input Set : A:\Seq.Listing.txt

Output Set: N:\CRF4\03222005\I825212A.raw

3 <110> APPLICANT: Benson, Timothy E. 5 <120> TITLE OF INVENTION: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF STAPHYLOCOCCUS AUREUS THIOREDOXIN REDUCTASE 6 8 <130> FILE REFERENCE: 0032.US1 10 <140> CURRENT APPLICATION NUMBER: 09/825,212A 11 <141> CURRENT FILING DATE: 2001-04-03 13 <150> PRIOR APPLICATION NUMBER: US 60/195,055 14 <151> PRIOR FILING DATE: 2000-04-06 16 <160> NUMBER OF SEQ ID NOS: 3 18 <170> SOFTWARE: PatentIn version 3.2 20 <210> SEO ID NO: 1 21 <211> LENGTH: 320 22 <212> TYPE: PRT 23 <213> ORGANISM: staphylococcus aureus 25 <400> SEQUENCE: 1 27 Met Gly Thr Glu Ile Asp Phe Asp Ile Ala Ile Ile Gly Ala Gly Pro 10 31 Ala Gly Met Thr Ala Ala Val Tyr Ala Ser Arg Ala Asn Leu Lys Thr 25 35 Val Met Ile Glu Arg Gly Ile Pro Gly Gly Gln Met Ala Asn Thr Glu 39 Glu Val Glu Asn Phe Pro Gly Phe Glu Met Ile Thr Gly Pro Asp Leu 43 Ser Thr Lys Met Phe Glu His Ala Lys Lys Phe Gly Ala Val Tyr Gln 70 47 Tyr Gly Asp Ile Lys Ser Val Glu Asp Lys Gly Glu Tyr Lys Val Ile 51 Asn Phe Gly Asn Lys Glu Leu Thr Ala Lys Ala Val Ile Ile Ala Thr 105 100 55 Gly Ala Glu Tyr Lys Lys Ile Gly Val Pro Gly Glu Gln Glu Leu Gly 115 120 59 Gly Arg Gly Val Ser Tyr Cys Ala Val Cys Asp Gly Ala Phe Phe Lys 130 135 63 Asn Lys Arg Leu Phe Val Ile Gly Gly Gly Asp Ser Ala Val Glu Glu 67 Gly Thr Phe Leu Thr Lys Phe Ala Asp Lys Val Thr Ile Val His Arg 170 71 Arg Asp Glu Leu Arg Ala Gln Arg Ile Leu Gln Asp Arg Ala Phe Lys 180 185 75 Asn Asp Lys Ile Asp Phe Ile Trp Ser His Thr Leu Lys Ser Ile Asn 200 79 Glu Lys Asp Gly Lys Val Gly Ser Val Thr Leu Thr Ser Thr Lys Asp

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84 2 87 M		Lys I	Pro 1	Leu '		230 Ala	Pro	Phe	Lys	Asp	235 Leu	Gly	Ile	Thr	Asn	240 Asp
88				:	245					250					255	
91 V 92	al C	3ly :	-	Ile ' 260	Val '	Thr	Lys	Asp	Asp 265	Met	Thr	Thr	Ser	Val 270	Pro	Gly
95 I 96	le E		Ala 2 275	Ala	Gly .	Asp	Val	Arg 280	Asp	Lys	Gly	Leu	Arg 285	Gln	Ile	Val
	hr A			Gly A	Asp (Gly	Ser	Ile	Ala	Ala	Gln	Ser	Ala	Ala	Glu	Tyr
100 290 295 300																
103	Ile	Glu	His	Leu	Asn	Asp	Gln	Ala	a Arg	g Ser	His	His	His	His	His	His
104 305 310 315 320																
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109 <212> TYPE: PRT																
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138	Asn	Gly	Asp	Asn	Gly	Glu	Tyr	Thi	Cys	s Asp	Ala	a Lev	ıle	∶ll∈	e Ala	Thr
139				100					105	5				110)	
142	Gly	Ala	Ser	Ala	Arg	Tyr	Leu	ı Gly	/ Let	ı Pro	Sei	f Glu	(Glu	Ala	Phe	. Lys
143			115					120					125			
146	Gly		Gly	Val	Ser	Ala			a Thi	Cys	Ası			Phe	туг	Arg
147		130		_	_	_	135					140				~-
		Gln	Lys	Val	Ala			e Gly	/ Gly	Z Gl			. Ala	. Va.	. GI	Glu
151		_	_	_	_	150			_	~7	155		_	~ 7		160
	Ala	Leu	Tyr	Leu		Asr	ı Ile	. Ala	a Sei			His	Leu	116		arg
155	_		~1	51	165		~ 1	.	1.	170			. 7		175	
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159	*	77 - 7	~ 1	180	~1	7	T 7 a	т1.	189		. mb.	. 7	7~~	190		~ Cl.,
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163	~1	77a7	195	~1	7. ~~	~1~	Mat	200		The		. 17.7	205		. 7.~~	, Acn
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167	Thr	210	λαν	Ser	Δαν	Δαν			1 901	رم. T.م.	1 Acr			G1.	, T.e.ı	ı Phe
171		GIII	VOII	Set	vsh	230		. 910	. 261	. пе	235			. 01)	שפנ	240
		בום	Tle	Glv	Hic) Acr	Th:	^ Als			Gli	Gls	, Glr	Leu
175	val	AIG	110	Gry	245	DCI		, ,,,,,,,		250					255	
117					243					200	•				20	-

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178 Glu Leu Glu Asn Gly Tyr Ile Lys Val Gln Ser Gly Ile His Gly Asn 265 260 182 Ala Thr Gln Thr Ser Ile Pro Gly Val Phe Ala Ala Gly Asp Val Met 280 183 275 186 Asp His Ile Tyr Arg Gln Ala Ile Thr Ser Ala Gly Thr Gly Cys Met 295 190 Ala Ala Leu Asp Ala Glu Arg Tyr Leu Asp Gly Leu Ala Asp Ala Lys 315 191 305 310 194 <210> SEQ ID NO: 3 195 <211> LENGTH: 333 196 <212> TYPE: PRT 197 <213> ORGANISM: Arabidopsis thaliana 199 <400> SEQUENCE: 3 201 Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser 10 5 205 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu 209 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly 210 213 Gly Gln Leu Thr Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro 217 Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser 70 221 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp 90 85 225 Phe Ser Ser Lys Pro Phe Lys Leu Phe Thr Asp Ser Lys Ala Ile Leu 226 100 105 229 Ala Asp Ala Val Ile Leu Ala Ile Gly Ala Val Ala Lys Arg Leu Ser 230 115 120 233 Phe Val Gly Ser Gly Glu Val Leu Gly Gly Phe Trp Asn Arg Gly Ile 135 237 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys 150 155 241 Pro Leu Ala Val Ile Gly Gly Gly Asp Ser Ala Met Glu Glu Ala Asn 170 245 Phe Leu Thr Lys Tyr Gly Ser Lys Val Tyr Ile Ile His Arg Arg Asp 180 185 249 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro 200 253 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp 215 257 Gly Glu Arq Asp Val Leu Gly Gly Leu Lys Val Lys Asn Val Val Thr 230 235 261 Gly Asp Val Ser Asp Leu Lys Val Ser Gly Leu Phe Phe Ala Ile Gly 250 245 265 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser 265 269 Asp Gly Tyr Val Val Thr Lys Pro Gly Thr Thr Gln Thr Ser Val Pro 275 280

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274 290 295

277 Ile Thr Ala Ala Gly Thr Gly Cys Met Ala Ala Leu Asp Ala Glu His

278 305 310 315 320

281 Tyr Leu Gln Glu Ile Gly Ser Gln Glu Gly Lys Ser Asp

282 325 330

VERIFICATION SUMMARY

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